

Memorandum

To: Stephanie Vaughn (USEPA)

Elizabeth Buckrucker (USACE)

From: Sharon Budney (CDM)

George Molnar (CDM)

Date: May 12, 2010

Re: Status Report (May 2010)

CPG Oversight of Physical Water Column Monitoring

Lower Passaic River Restoration Project

On behalf of the United States Environmental Protection Agency (EPA) and the United States Army Corps of Engineers (USACE), Kansas City District, CDM Federal Programs Corporation (CDM) is providing oversight of the Cooperating Parties Group (CPG) remedial investigation/feasibility study (RI/FS) field activities associated with physical water column monitoring (PWCM), and the collection of physical data in the Lower Passaic River (LPR).

CDM oversight activities were conducted May 1 through May 4, 2010. Oversight included the observation of instrument maintenance, and collection of samples in the LPR in support of the CPG PWCM study. In addition, CDM also collected split samples at select locations. All activities were conducted in accordance with the CPG Quality Assurance Project Plan (QAPP)/Field Sampling Plan Addendum, Remedial Investigation Water Column Monitoring/Physical Data Collection for the Lower Passaic River, Newark Bay and Wet Weather Monitoring, Lower Passaic River Restoration Project, Revision 4, March 2010.

Photographs of field activities can be found in Attachment 1. Copies of the logbook notes can be found in Attachment 2.

Instrument Maintenance at Locations below Dundee Dam (May 1 and 2, 2010)

The following summarizes oversight observations of instrument maintenance conducted May 1 and 2, 2010 at river miles (RM) 1.4, 4.2, 6.7, 10.2, and 13.5.

Prior to retrieving moored instruments for their monthly maintenance check, CPG contractor Ocean Surveys Incorporated (OSI) lowered a conductivity, temperature, and depth/optical backscatter (CTD/OBS) meter next the instruments to obtain a profile of real-time measurements through the water column. Afterwards, surface water samples for suspended solids concentration (SSC) were collected three feet above river bottom, and three below river surface via pump mounted to the CTD/OBS meter. Samples were collected by CPG contractor AECOM . During sample collection, real-time readings were measured by the CTD/OBS meter. This was repeated at all locations.

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Once the SSC samples were collected, all instrumentation was pulled, cleaned, and inspected for damage. Batteries were checked and replaced if needed, and data were downloaded. All instruments pulled were functioning fine and required no replacement or re-calibration. After servicing, instrument arrays were reassembled and re-deployed within the same area as they were pulled.

After all instruments were re-deployed, crews waited approximately 20 minutes to allow any suspended sediments stirred up during re-deployment to settle or be swept away. Afterwards, surface water samples for SSC were collected three feet above river bottom, and three feet below river surface. Prior to sample collection, a CTD/OBS meter was lowered to obtain a profile of real-time measurements through the water column adjacent to the meters. Real-time readings were also measured during sampling via pump and tubing which were attached to the CTD/OBS meter.

Coordinates of instruments and water depths at re-deployment are as follow:

- RM 1.4: Northing: 691231.60/Easting: 598001.36; Depth: 19 feet
- RM 4.2: Northing: 692308.12/Easting 588245.50; Depth: 19 feet
- RM 6.7: Northing: 702839.46/Easting: 586136.11; Depth: 13.5 feet
- RM 10.2: Northing: 719746.69/Easting 592104.67; Depth: 17.8 feet
- RM 13.5: Northing: 734285.92/Easting: 597208.94; Depth: 17.2 feet

Boat-Based Transect Survey at Locations below Dundee Dam (May 3, 2010)

The following summarizes oversight observations of acoustic Doppler current profile (ADCP) transect surveys and the collection of surface water samples at locations below Dundee Dam.

CDM oversight staff observed boat-based ADCP transect surveys at RMs 1.4, 4.2, 6.7, 10.2, and 13.5. Transect surveys were conducted during ebb and flood tides. Each survey was conducted in the area of three predetermined locations (P1 through P3) moving across the river channel. Once each survey was finished, crews lowered a CTD/OBS meter to obtain a profile of real-time measurements through the water column. This was conducted at each location followed by the collection of surface water from three feet below river surface, and three feet above river bottom via pump and tubing mounted to the instrument. Samples were collected for SSC, DOC, and POC analysis from locations collocated with moored instruments, and from locations furthest away. These locations consisted of P1 and P3 at every RM. No samples were collected for DOC and POC analysis at location P2 at any RM.

During sample collection, CDM oversight staff observed the pre-labeled CPG bottle for the incorrect transect location (P3 instead of P1) at RM 13.5 was filled by the AECOM representative. CDM informed the sampler who subsequently discarded the sample and bottle and re-sampled using a new bottle. CDM corrected AECOM another two times during separate instances as he was ready to sample using pre-labeled bottles assigned for different RM locations. Despite these discrepancies, the correct bottles were filled for their corresponding RM locations.

CDM oversight staff collected split samples during the flood tide transect survey from both depths at locations collocated with moored instruments. Samples were collected for SSC, DOC, and POC analysis, and were collected at the same time as those collected by AECOM via "Y" junction at the end of tubing which was connected to the pump. Split samples and corresponding CPG samples are presented in Table 1. Split samples were delivered via hand courier to the EPA Division of Environmental Science and Assessment (DESA) laboratory for analysis. Copies of CDM's signed chain of custodies can be found in Attachment 3.

<u>Instrument Maintenance and Boat-Based Transect Survey above Dundee Dam (May 4, 2010)</u>

The following summarizes oversight observations of OBS meter maintenance, the ADCP transect survey, and collection of surface water samples above Dundee Dam (RM 17.5). Per the CPG QAPP, only an OBS meter is deployed at this location which is affixed to a buoy suspending it three feet below river surface.

Prior to pulling the OBS meter for maintenance, OSI lowered a CTD/OBS meter to obtain a profile of real-time measurements through the water column adjacent to the location of the buoy-mounted OBS meter. Following the cast, the meter was lowered again and samples were collected three feet below river surface, and three feet above river bottom while the meter was recording data. Samples were collected by AECOM for SSC analysis.

After sampling, the OBS meter was pulled, cleaned, and inspected, and data were downloaded. The OBS meter was functioning fine and did not require any re-calibration, and was redeployed in the correct location. Approximately 20 minutes after re-deployment to allow sediments to settle, a second set of SSC samples and concurrent real-time CTD/OBS readings were collected. The coordinates of the buoy-mounted OBS meter and water depth are as follow:

• RM 17.5: Northing: 747516/Easting 594477; Depth: 9 feet

Following post-maintenance/re-deployment sampling, OSI conducted a boat-based ADCP transect survey. After the survey, a CTD/OBS meter was lowed at each of four predetermined locations (P1 through P4) along the transect line to obtain a profile of real-time measurements through the water column. Following the CTD/OBS cast at each location, AECOM collected samples from three feet below river surface. At the location of the buoy-mounted OBS meter, samples were collected three feet below river surface and three feet above river bottom. All samples were analyzed for SSC, DOC, and POC. CTD/OBS measurements were recorded in real-time during sampling activities.

CDM oversight staff collected split samples from both depths for SSC, DOC, and POC analysis at Location P2. Samples were collected at the same time as those collected by AECOM via "Y" junction at the end of tubing which was connected to the pump. Split samples and corresponding CPG samples are presented in Table 1. Split samples were delivered via hand courier to the EPA DESA laboratory for analysis. Copies of CDM's signed chain of custodies can be found in Attachment 3.

Table 1

Cooperating Parties Group and CDM Split Sample Identification May 2010 Physical Water Column Monitoring Oversight Lower Passaic River Restoration Project Lower Passaic River, New Jersey

River	Mooring	CPG Sample ID	CDM Split Sample ID	Split Sample ID I QC Samples		Collection	Analysis
Mile	Location	·	<u> </u>	·	Event	Date	
1.4	P3	10A-E07-T014-P3-AS	10A-E07-T014-P3-AS-C		flood	5/3/2010	SSC, DOC, POC
		10A-E07-T014-P3-BS	10A-E07-T014-P3-BS-C		flood	5/3/2010	SSC, DOC, POC
4.2	P1	10A-E07-T042-P1-AS	10A-E07-T042-P1-AS-C		flood	5/3/2010	SSC, DOC, POC
		10A-E07-T042-P1-BS	10A-E07-T042-P1-BS-C		flood	5/3/2010	SSC, DOC, POC
6.7	P3	10A-E07-T067-P3-AS	10A-E07-T067-P3-AS-C		flood	5/3/2010	SSC, DOC, POC
		10A-E07-T067-P3-BS	10A-E07-T067-P3-BS-C		flood	5/3/2010	SSC, DOC, POC
10.2	P1	10A-E07-T102-P1-AS	10A-E07-T102-P1-AS-C		flood	5/3/2010	SSC, DOC, POC
		10A-E07-T102-P1-BS	10A-E07-T102-P1-BS-C		flood	5/3/2010	SSC, DOC, POC
13.5	P3	10A-E07-T135-P3-AS	10A-E07-T135-P3-AS-C		flood	5/3/2010	SSC, DOC, POC
		10A-E07-T135-P3-BS	10A-E07-T135-P3-BS-C		flood	5/3/2010	SSC, DOC, POC
17.5*	P2	10A-E06-T175-P2-AS	10A-E06-T175-P2-AS-C	MS **	NA	5/4/2010	SSC, DOC, POC
			10A-E06-T175-P2-AS-X	Duplicate ***	NA	5/4/2010	SSC, DOC, POC
		10A-E06-T175-P2-BS	10A-E06-T175-P2-BS-C		NA	5/4/2010	SSC, DOC, POC

CPG - Cooperating Parties Group

ID - identification

QC - quality control

SSC- suspended solids concentration

DOC - dissolved organic carbon

POC - particulate organic carbon

MS - matrix spike

NA - not applicable; location above head of tide

- * location above Dundee Dam
- ** MS only for DOC analysis
- *** field duplicate sample of CDM split sample 10A-E06-T175-P2-AS-C denoted with the prefix "X"

CPG samples and CDM split samples are identified by Program-Event-Transect-Station-Depth-Type; split samples are followed by the prefix "C" Where:

Program - Two-digit year plus "A" identifying the Spring 2010 Passaic River sampling program

Event - "E" plus two digit sequence number for sampling event

Transect - "T" plus three-digit representation of river miles by tenths. For example, T042 indicates river mile 4.2

Station - "P" plus single-digit sequence for position along transect moving from left bank. For example, "P2" for second location.

Depth - Single character sequence letter for depth interval. "A" for depth interval nearest river surface (i.e., three feet below

surface); "B" for intervals of increasing depth (i.e., three feet above river bottom)

Type - Single character for sample type: "S" for normal sample

Attachment 1 Photographs of Physical Water Column Monitoring Activities



Photo 1. CTD/OBS meter



Photo 2. CTD/OBS/ADCP array; ADCP can be seen on the left



Photo 3. CTD/OBS/ADCP array being pulled for maintenance



Photo 4. AECOM representative collecting a sample for SSC analysis. No split sample was collected at this time.

Attachment 2 Copies of Oversight Field Logbook Notes

138 Location $\angle PK$ Location LPB Date 5/1/18 Date 5/1/10 Project / Client (surer Passair River Main tenance Check Oversight Project/Client Kower Passaic River Maintenance Check Desight (mw) 745 Mel Koberle (MK) CDM at 1225 Pulled up CTD10BS & ADCP acht club w/ # OTC - mil downloading data / clean /change battones Steve Bodack & Dustin Kach onsite Data looks good men 1350 Redeploy CTD/OBS & ADCP mobilizing for the day m PPE Level D modified GRS E 592704.67 N 71974669 Weather 80°F. Dunny -V Depth to Water: 17.8 below -815 Mile Houser ofisite A E com 1355 Collecting Second SSC sample three feet from bottom o below surface EDS TIBOPIBS + AS 15'4/15'6 Heading up to Biver Mile 13.5 935 At River mile 13.5 + cast C70 10BS to grab SSC samples from bottom + top E09 T10291 BS. AS 1759/1801 Dota was recording while collecting sample 1408 Heading to River Mile 6.7 1017 Kulled up CTD/OBS & ADCP Note duplicate EDGTOZPIBT 02-BS and down loading data, Cleaned - Changed 1422 A+ River Mile 6.7 m the batteries - data looks good men 1445 Collecting CTDIOBS Sample 1140 Re-deployed CTD10BS + ARPS SSC - bottom and top. Collecting data GPS: E 59720894 N734285.92 1505 - Only collected a bottom 880 Depth to H20: 17.2' bgs NAD 83 sample (165) from CTD/OBS-the 1150 Collecting second sample SSC tubing is changed or kinked - water E095 T135 P3 BS + AS 1357/1358 is not coming out through tubing -E09 T135 P3 BS + AS 155 /1553 when unhooking the long tubing-1154 Heading to River Mile 10.2 the CTD1085 works/pumps-so its in the tubing. Crew wor King to fix 1210 At River Mile 10.2 Cost CTD/OBS to grab SS (samples from bottom + top the problem. 1526 - Fixed Hibing grabbed AS sample mal 5/11/0

Project / Client Lower Passaic River P Maintenance Cleck Oxungst Project/Client Lower Passace Wiver maintanence Chek Oversight (1) 1530 Pulling up CHOLOBS - ADCP 6045 - Mel Koberle (MK) comonste data downtoad/ Clean/Change batteries Ocen Surey. Dustin Kach - Ryan Data looked good mer Boiled AE com: Jim Alderson 1650 Redeplay CTD/OBS + ADCP Weather Rainy 80.F. Gloudy GPS: E 586136.11 N 702839.46 PPE: Level D mod WY life Jacket Depth to H, O: 13.5' men # 45 Crew mobilizing on boat 1657 Collecting SSC Sample from 810 Conducted Hr5 meeting - AECOM Tope Bottoms 74 181101844 1925 EOS TO67 P3 RS/85: 1844/ 1844 and OTC - Starting at Thiver muley 13.5) - mapping transect. Had some EU9 TO67 P3 R\$ 185: 2059 12100 110 computer problems - but fixed men 1702 Heading back to the yacht club 835 Lowering CTD/OBS - collecting data Completed Jasks Borthe day 842AEcom collect E07 TI35 P1B5/AS 1738 Crew backat yacht clus at 1242/1243 BOR POC/DOC/SSC 855 A ECOM COllect E07 TI35 P2/BS/AS 1730 E09 T067P3 x R-Field Blank Put pump in DI water & collect sample at 1255/1250 Bor Poc/ Doc/ssc 1745 Crew offsite Note: com had to tell Ascom to change sample 10 used P3 bottles at PI location Note: CTD10BS is dropped/casted fordepth to water - quality readings before samply 900 AEcom collect ED7 TI35 P3 BE/ BAS 0+ 1306/1308 CTM collect 50lit sample 10+E0+135 P3B5/A5 a+ 906/908 913 Heading to River Mile 10.2)

142 Location PL Location UP R Date 5/3/10 Project/Client BURRISH'C Ring
Split Sampling DOC/1856 Project / Client Howar Passace Wive Split Sampling Doc/Poclose 935 A+ Giver mile 10.2 mappings 1200 Back at CPG facility - transfer 7940 AECOM COllect 10A-E07-T105 ASIBS samples to Stef British (com) for processing at 1345/1348 BN DOC/POC/SSCOTEDMA Take lunch - moe Collect Split Sample (104507-T102 ASIGS) 1330 mk back at CPG facility crew at 945/948' men 573/10 mobilizing for flood tide EDB event 955 AECOM Collect 10AEOTT10ZP2BSIAS 1400 Crew Icaving dock to Rivermile 13.5 at 1355/1350 B~ Pac/DAC/55c-1401 mapping at RM 13.5 mm
1409 Casting CTD/0BS before Sampling 1002 AECOM COILECT 10AEOT TOZP3 BSIAS at 1402/1406 gr PX/DOC/55Ccollecting readings while sampling the Note: A Ecom collected adeplicate at ADCP is hooked up to the GPS and also collects 104 E07 TIBS PIAS called in AT data before during sampling por 73/10 1030 At Live Mile 6.7 mapping 1047 AECOM Collect 10A E07 TO67 PIBS/AS 1214 ARCOM COLLECT LOARDS TO 135 PLOYAS. at 1814/1817 for POC/DOC/SSC a at 1450/ 1452 gar ROC/ DOC/SSC 1425 A Ecom collect to ASOB TISS PABIAS ASCOM Collect 10AEO7 TOG 7P2 BS/AS at 1825/1826 for POC/DOC/JSC 2 27 1459/1501 BN POC/DOC/DOC 1457 ASCOM Collects 10A SOB TISS P3 B5/A5 105 AECOM Collect COAECTTOGTP3 BS/AS at 1832/1834 per POC / DOC/SSC at 1506/1508 for pac/Doc/osc-Note: duplicate Ascorn collected at 10ASO8-Com collect split sample [IOAEO7 TO67P3 -T135 P385 Called 17 "BT" - 1835/18/18 BSIAS at 1106/1108 B- POCIDOCISSC 1437 Heading to River Mile 10.21~ 1120 Craw heading back to CRG Bacilly 1450 A+RM 10.2 - mapping Vote: AECOM collected duplicate at in) 1503ASCOM collect 10A - 1508 T102-PL 10AEO7TO67PIAS called it AT-m BS/As at 1903/1907 B- POCIDOCISC 1913 AE COM COLLECT 10A-208-TWAT and 10 AEO 7 Toloth3 &s Called it BT mell 5/3/10 --

Project / Client Couler Passaic River Split Sampling Doc100c/55c -P2 BS/As at 1913/19 Bar Doc1POC/SSC 126 ASCOM Collect 10A-E08-T102-P3-BSIAS at 1926/1929 Bar POCI DOCISSC -m Note mk had to inform Ascom twice about ready to sample using bottlewire "I the wrong label on them Rm. P# Note AEcom duplicate 10A E08-T102-P2 -As called it "AT" -dup at 1913 Note: spurts of heavy - stop sampling AECOM did duplicate at 10A-E08- T102-P3-As called it "AT" dup cot 1929 1530 Heading to River mile 6.7 1548 A+ River mile 6.7 - mapping 1655 A Ecom collect 10A - E08 - Tolo7 -P1-BS/ AS at 2005/2007 Our POC/ DOC/SSC 16 4 Ecom collect 1017-808-T067-P2-BS/ As at 2016/2017 Bur POCI DOCISSC -1622 A ECOM collect 10 A EOB TO 67 PS BS/AS_ at 2022/2024 BOT POC! DOC! JSC ~ 1630 Completed Sampling / Mapping for the day Heading book to CAT footing 1705 back at C/G Bacility I crew demobility. MK of sike /

Project / Client Lower Passaic River Split Sampling Doc/Poclare CDM Split Sample Summary Scimple ID time 10A-E07-T135-P3-BS-C 906 10A-807-7135-P3-AS-C 908 10A-EO7-TIDA-P1-AS-C 948 10A- 807- TIDZ- P1-BS-C 945 10A- E07- TO67-P3-AS-C 1108 10A- E07-T067-P3-BS-C 1106 Analysis: It Liter Amber-Doc POCISSC O. Fum 3 1-Liter Amber SSC 1.5 um Bilter - ice on boat Laboratory: DESA Aralysical. mel 5/3/10

Lower Passaic River 5-2-10 Limer Rassaic River 5-2-10 USACE LPR 7. Pallowsh - LRP 9-2-10 J. Kultural MF! Modified Level 10 * Note-Damples Collected has been placed on ice. 225210. Weather! Overcast Personnel Jon Walker (AE COM),
TR (CDM) Dustinkach
and Steve Boder (OSI) 1-05-7014-P3-B5 597971.31 691234,20 " A 5 597489,69 691224,35 0852 pulled up ADCP-SB flushes out ADCP with water 1900 OSI Starts to download objective. At Com will be Services Cottecting Samples at 2125-2-10 river mile 1.4 and 4.2 data from ADCP. 0755 JR arrives on RV rody 1020 lata download complete 1035 ADCP re-deployed Gliban JW holds daily health and JS05 Coordinates 1598001.36 691231.60 Satety meeting as iquired in their site 14+5 plan. RU (cody I deploys and 1949 DK deploys pump for 22 Sampling much later depth 19 060 1045 JW Collects Em. 1014-P3 neads to river mile 0620 Ry ready I amives at river - B5 X 597999,73 Y 69123457 JW Collects E09-T014-P3-8 mile 1,4 0825 OSI Computer mailfuction has TRUSTE Mitrile glaves were workn as required in AEcomis H+S Phn Samples were collected 3 occured so OSI re-depos tron wher surface and bottom 0835 JW OF AF Com Collects SUXFACE. 1050 OSI acrises at Joseph Sample E05, T014, - 83-85 Street Bridge area in and 5-2-10

1965aic River 1965-2-10 Passa, C Ki Veris 5-2-18 the LPRGA/USACE LARGA , USACE A. Rikwoli 4. Valour 361 E09-T042-P1-AS Sample order to massure time 95I arrives at * Note - AECOM'S Sample collection 1113 E05-T042-PI-BS time is in Greenich i'e 1700 and 1701 were last 1115 E05-TO42-PI-A5 two sample collection times in Greenwich. 310,057 takes a river X 538244,98 , Y 692310,64 125 Dulled up ADCP -5Ba1125 Dulled up ADCP -5Ba1140 OST begins data 335 Ruredy Harrives back at LPR yacht dub. download and 45-I 1530 Dannipag and Calibration out 250 Busy and ADCF redeployed X 588246.50 Y 692306.12 OSI Stations at Sampling To Cation adjocent 300 E09-7042-PI-BS Sample 2.2 5-2-10

lassaic Kiver 5.240 Passac Kiver 5-3-10 LPRSA / USACE Kalendaria ' 0930 arrive at 1.4 river mile in order for The REKSONN STE SE COM, JW to sample fi location. of (AECOM, 50, and kevin mark (COI) 0932 10A-E07-TOM. PI-BS FORPER 0934 10A-E07-TOM. PI-BS FORPER AS FIRE weather overcast hear rain objective split sample collection 10A-E07-T014-42-135 09395ample time. 10A-E07-TO14-P2-AS JR amiles onsite 10 prepares equiloned 09405ample time 10A-607-TOIN Louis Berger Completes Work on Mackensack. *10949 Spit Sample 10A-E07-To14-PS 0910 SB and kevin M depart * Note 0.5I. 1 JW. *0947 Split Sample 10A-E07-To19accepted by CDM? - Ja will be accepting HOLL SPIT TO THE PICE PLES

KIDLE SPIT TO THE PICE PLES

KIDLE SPIT TO THE PICE PLES

FIRST TO THE PICE PLES

FIRST TO THE PICE PLES

TO T MOIT Split Samples from location 1.4 p3 and Phology by 5 briefing 1017 10A-E07-TO42-P2-BS Shows the extreme Weather that is occurrently sample time. eta a stight pace

-- Passair River 5-3-10 1000 Possaic. River in 5340 IMSA/USACE IMPORTAL PROMILY SACE A. Rahaman J. Westership KM (USI) JR (COM), Mike Hawer (AEGON) 1014 10A-EUT-P3-BS Sample 1545 ODI aprives at Accomis 1025 10A- E07-P3-A5 Sample transcent area OSI trys to +ime 1045 we must with RU Skimmer line up at Correct position 1558 Gample time for 508-7014ron water for 05I Coordination purposes 1600 Sample time for Eds-Toly-1115 grove back at racht Qub. JR 15 awaiting for any two or the afternoon 1609 Sample time for E08-T014defarture time out P2-B5 13 cyrrently Dowinged 1606 Dample Hime for Eos-Taydownloading data in Order to calculate atknown * Note - water depth 15 Top Sample B totam 12 1610 Sample time for E03-Toil-18-B5 Sample CEPHO 12 1120 SEE Thas determinate that JR Should be 1612 Sample time for E08-Tolyqualting to be be be 13-A3 Sample depth 3 1624 OSI arrives at River 1350 STRIONSITE at Yacht trom Spiro deforts yesh 1633 Sample Hims for EOS-TO42+ * Continued on A. 25

ROSAIC RIVER 5.3-10 LERSA/USACE Passaic Rivar 5-3-10 LIRSA/USACE J. R. Marsty 3 - 18mple Dammers 1634 Sample time For 10A-E08-Time COMID QA/QC Lab 0945 10A-E07-7014-P385 CNC Desa 1639 Sample Lime For 10A-EUX-TU42-0947 \\ " AS 1639 Sample time for ICA-EOS-1011 10A-160742-81-05-C 1013 11/ 45"" TO42-P2- AS Sample depth 3 Samples were Collected in 1-liter amber 1643 Sample time for 10A-EOSwide mouth jars-ice only. TO42-P3-BS lamber for POC/DOC 1645 Sample time for 104-1508-Suggested Solids 1705 RU Rendy II arrives 1720 JR departs Site

1000 Passa; C. River 100 5-4-10 Learning Passai Riverious 5-4407 LARSA USACE Page 17 Class LPRSA/USACE Water of ME! Modified Level 10 Weather: 70 farenhett 1312 E06-11/5-11 Der Werscheit 1320 E06-11/5-11-AS sample time objective: OverSight and Split time, CDM accepts split and Split time, CDM accepts split and Split time. 1312 EOG-TI75-PI-BS Sample 1 *1321 EGG-TIB-P2-45 COM JR is awaiting Dustin accept 5 Split Sample Called A MS/MSD Kach and crew, 1105 JR meets at burder Dam and duplicate was collecte with OSI and AEGOM. Dufficate de Eco-Ti75-p2-1110 Health and Safety Gricfing held, 1120 boat depart > elmwood E06-TI75-P3-AS Collected 1335 ECG-TITG-PLI-AS Collecte park in brother to head to Dunder Vam, 350 Boat (Edio Echo) arrives back, at Elmuno Rox boat arrives at Dundee Dan buoy 5. 1410 JR deports site 1201 E 05-T175-P2-BS Sample 1202 EOG- T175-P2-AS Sample 1320 EOG-1176-P2-B5-C Time Sample it CDM QA GC Lab AS+C MS/MSD Desa

// AS+C MS/MSD

// X dupof

// As-C time, is bulled From the 1341 Par baox in order to download 1 22 5

Attachment 3 Copies of Signed Chain of Custodies

EPA USEPA Contract Laboratory Program Generic Chain of Custody

Reference Case:	D
Client No:	

	-				Chemina.		
Region:	2	Date Shipped:	5/3/2010	Chain of Custody Re	cord	Sampler	
Project Code:		Carrier Name:	Courier			Signature:	
Account Code:		Airbill:	Counci	Relinquished By	(Date / Time)	Received By	(Date / Time)
CERCLIS ID:	NJD980528996	Shipped to:	DESA Laboraties/EPA	15-4-0 - D: A	n=100110 141	20	
Spill ID:	96	ompped to:	2890 Woodbridge Ave	Stop But	ri olkolco.	30	
Site Name/State:	Lower Passaic River Restoration Project/NJ		Bldg. 209	2 '			
Project Leader:	George Molnar		Edison NJ 08837	3			
Action:	Combined RI/FS		(732) 906-6886	9			
Sampling Co:	CDM			4			

MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
Surface Water/ Stefanie Britch	L/G	D/POCSS0.7 (21), SS (1.5) (21)	(Ice Only) (2)	10A-E07-T014-P3-AS-C S: 5/	3/2010 9:47	1.52
Surface Water/ Stefanie Britch	L∕G	D/POCSS0.7 (21), SS (1.5) (21)	(Ice Only) (2)	10A-E07-T014-P3-BS-C S: 5/	3/2010 9:45	**
Surface Water/ Stefanie Britch	L/G	D/POCSS0.7 (21), SS (1.5) (21)	(Ice Only) (2)	10A-E07-T042-P1-AS-C S: 5/	3/2010 10:13	-
Surface Water/ Stefanie Britch	L/G	D/POCSS0.7 (21), SS (1.5) (21)	(Ice Only) (2)	10A-E07-T042-P1-BS-C S: 5/	3/2010 10:11	
	SAMPLER Surface Water/ Stefanie Britch Surface Water/ Stefanie Britch Surface Water/ Stefanie Britch Surface Water/	SAMPLER TYPE Surface Water/ Stefanie Britch Surface Water/ Stefanie Britch Surface Water/ Stefanie Britch Surface Water/ Stefanie Britch Surface Water/ Stefanie Britch	SAMPLER TYPE TURNAROUND Surface Water/ Stefanie Britch L/G D/POCSS0.7 (21), SS (1.5) (21) Surface Water/ Stefanie Britch L/G D/POCSS0.7 (21), SS (1.5) (21) Surface Water/ Stefanie Britch L/G D/POCSS0.7 (21), SS (1.5) (21) Surface Water/ Surface Water/ L/G D/POCSS0.7 (21), D/POCSS0.7 (21),	SAMPLER TYPE TURNAROUND PRESERVATIVE/ Bottles Surface Water/ Stefanie Britch L/G D/POCSS0.7 (21), SS (1.5) (21) (Ice Only) (2) Surface Water/ Stefanie Britch L/G D/POCSS0.7 (21), SS (1.5) (21) (Ice Only) (2) Surface Water/ Stefanie Britch L/G D/POCSS0.7 (21), SS (1.5) (21) (Ice Only) (2) Surface Water/ Stefanie Britch L/G D/POCSS0.7 (21), SS (1.5) (21) (Ice Only) (2)	SAMPLER TYPE TURNAROUND PRESERVATIVE/ Bottles LOCATION Surface Water/ Stefanie Britch L/G D/POCSS0.7 (21), SS (1.5) (21) (Ice Only) (2) 10A-E07-T014-P3-AS-C S: 5/2 Surface Water/ Stefanie Britch L/G D/POCSS0.7 (21), SS (1.5) (21) (Ice Only) (2) 10A-E07-T014-P3-BS-C S: 5/2 Surface Water/ Stefanie Britch L/G D/POCSS0.7 (21), SS (1.5) (21) (Ice Only) (2) 10A-E07-T042-P1-AS-C S: 5/2 Surface Water/ Stefanie Water/ L/G D/POCSS0.7 (21), SS (1.5) (21) (Ice Only) (2) 10A-E07-T042-P1-BS-C S: 5/2	SAMPLER TYPE TURNAROUND PRESERVATIVE/ Bottles LOCATION DATE/TIME Surface Water/ Stefanie Britch L/G D/POCSS0.7 (21), SS (1.5) (21) (Ice Only) (2) 10A-E07-T014-P3-AS-C S: 5/3/2010 9:47 Surface Water/ Stefanie Britch L/G D/POCSS0.7 (21), SS (1.5) (21) (Ice Only) (2) 10A-E07-T014-P3-BS-C S: 5/3/2010 9:45 Surface Water/ Stefanie Britch L/G D/POCSS0.7 (21), SS (1.5) (21) (Ice Only) (2) 10A-E07-T042-P1-AS-C S: 5/3/2010 10:13 Surface Water/ Stefanie Britch L/G D/POCSS0.7 (21), SS (1.5) (21) (Ice Only) (2) 10A-E07-T042-P1-BS-C S: 5/3/2010 10:11

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced?
D/POCSS0.7 = DOC	C POC Suspended Solids (0.7 um filt, SS (1.5) = Suspended	Solids (1.5 um)	

TR Number: 2-043013577-050310-0001



 €EPA	USEPA Contract Laboratory Program Generic Chain of Custody
	Generic Chain of Custody

Reference Case:	D
Client No:	

Region:	2	Date Shipped:	5/3/2010	Chain of Custody Re	cord	Sampler Signature:	
Project Code:		Carrier Name:	Courier			Signature.	
Account Code:	,	Airbill:		Relinquished By	(Date / Time)	Received By	(Date / Time)
CERCLIS ID:	NJD980528996	Shipped to:	DESA Laboraties/EPA	Ston Shitz	05/03/10 1	437)	
Spill ID:	96		2890 Woodbridge Ave	Charge were	-0/09/01		
Site Name/State:	Lower Passaic River Restoration Project/NJ		Bldg. 209	2			
Project Leader:	George Molnar		Edison NJ 08837 (732) 906-6886	3 -			
Action:	Combined RI/FS		(732) 900-0000				
Sampling Co:	CDM			4			

SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
10A-E07-T06 7-P3-AS-C	Surface Water/ Stefanie Britch	L/G	D/POCSS0.7 (21), SS (1.5) (21)	(Ice Only) (2)	10A-E07-T067-P3-AS-C S: 5/	3/2010 11:08	-
10A-E07-T06 7-P3-BS-C	Surface Water/ Stefanie Britch	L/G	D/POCSS0.7 (21), SS (1.5) (21)	(Ice Only) (2)	10A-E07-T067-P3-BS-C S: 5/	3/2010 11:06	_
10A-E07-T10 2-P1-AS-C	Surface Water/ Stefanie Britch	L/G	D/POCSS0.7 (21), SS (1.5) (21)	(Ice Only) (2)	10A-E07-T102-P1-AS-C S: 5/	3/2010 9:48	
10A-E07-T10 2-P1-BS-C	Surface Water/ Stefanie Britch	L/G	D/POCSS0.7 (21), SS (1.5) (21)	(Ice Only) (2)	10A-E07-T102-P1-BS-C S: 5/	3/2010 9:45	
10A-E07-T13 5-P3-AS-C	Surface Water/ Stefanie Britch	L/G	D/POCSS0.7 (21), SS (1.5) (21)	(Ice Only) (2)	10A-E07-T135-P3-AS-C S: 5/	3/2010 9:08	
10A-E07-T13 5-P3-BS-C	Surface Water/ Stefanie Britch	L/G	D/POCSS0.7 (21), SS (1.5) (21)	(Ice Only) (2)	10A-E07-T135-P3-BS-C S: 5.	/3/2010 9:06	- 17

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Chain of Custody Seal Number:	
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced?	

SEPA USEPA Contract Laboratory Program Generic Chain of Custody

Reference Case:	D
Client No:	1

Region: Project Code:	2	Date Shipped:	5/4/2010 Courier	Chain of Custody	Record	Sampler Signature: Signature:		
Account Code:	,	Airbill:	000	Relinquished By	(Date / Time)	Received By	(Date / Time)	
CERCLIS ID:	NJD980528996	Shipped to:	DESA Laboraties/EPA	15-200 (X/Q)	£ 05/04/10 1	4.00		
Spill ID:	96	Supped to:	2890 Woodbridge Ave	of the same	X 03/04/10 1	φυ <u>σ</u>		
Site Name/State:	Lower Passaic River Restoration Project/NJ		Bldg. 209	2	-			
Project Leader:	George Molnar		Edison NJ 08837 (732) 906-6886	3				
Action:	Combined RI/FS		(732) 900-0080					
Sampling Co:	CDM	ļ		4				

SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No.; PRESERVATIVE Bottles	STATION LOCATION		E COLLECT TE/TIME	QC Type
10A-E06-T17 5-P2-AS-C	Surface Water/ Stefanie Britch	L/G	D/POCSS0.7 (21), SS (1.5) (21)	(Ice Only) (3)	10A-E06-T175-P2-AS-C S	: 5/4/2010	13:21	
10A-E06-T17 5-P2-AS-X	Surface Water/ Stefanie Britch	L/G	D/POCSS0.7 (21), SS (1.5) (21)	(Ice Only) (2)	10A-E06-T175-P2-AS-X S	: 5/4/2010	13:21	FIELD DUPLICATE SYB
10A-E06-T17 5-P2-BS-C	Surface Water/ Stefanie Britch	L/G	D/POCSS0.7 (21), SS (1.5) (21)	(Ice Only) (2)	10A-E06-T175-P2-BS-C S	5/4/2010	13:20	05/04/2010

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: 10A-E06-T175-P2-AS-C	Additional Sampler Signature(s):	Chain of Custody Seal Number:						
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C. Grab = G	Shipment Iced?						
D/POCSS0.7 = DOC POC Suspended Solids (0.7 um filt, SS (1.5) = Suspended Solids (1.5 um)									

TR Number: 2-043013577-050410-0001